## PERCENTAGE LOG OF WATER-WELL CUTTINGS UTAH GEOLOGICAL SURVEY

DWRi Appropriation #: 51-8008(a30465) Well Owner: Shelly Marshall

Location: (D-12-4)10ddc, Sanpete County, Utah Win #: 36499

Driller: Midway Drilling Geologist: Janae Wallace, 7/1/08

Depth Range (feet)			PERC	ENTA(	GES		
		unconsolidated co			nsolidated		COMMENTS
		css*	gr*+	ms*	ss*	ls*	
0	10	95	5	0	0	0	orange clay, silt, and sand with minor yellow and gray gravel; sand is fine to medium and consists of quartz, feldspar, and lithic fragments; gravel is angular to subangular and consists of limestone, sandstone, and siltstone clasts; maximum clast size (MCS) is 2 cm, average clast size (ACS) is 0.5 cm; calcareous
10	20	5	95	0	0	0	orange clay, silt, and sand with red, yellow, and gray gravel; sand is fine to medium and consists of quartz, feldspar, and lithic fragments; gravel is angular to subangular and consists of limestone, sandstone, siltstone, and chert clasts; MCS is 1 cm, ACS is 0.5 cm; calcareous
20	30	5	95	0	0	0	"MCS is 2.5 cm, ACS is 1 cm
30	40	10	90	0	0	0	"MCS is 2.5 cm, ACS is 1 cm
40	50	2	98	0	0	0	"MCS is 2 cm, ACS is 0.5 cm
50	60	0	0	0	tr	100	yellow-tan and minor gray oolitic limestone; trace pink sandstone; calcareous; Green River Formation?
60	70	0	0	0	tr	100	yellow and tan oolitic limestone and sandy limestone; trace pink sandstone; calcareous

<sup>\*</sup> css=clay, silt, and sand; gr=gravel; ms=mudstone; ss=sandstone; ls=limestone; ¹angular nature and estimated clast size may be due to action of drill bit, not a clast characteristic

Depth Range (feet)			PERC	ENTA	GES		
		unconsolidated		consolidated		ited	COMMENTS
		css*	gr*+	ms*	ss*	ls*	
70	80	0	0	20	0	80	tan and green oolitic limestone and mudstone; trace sandstone; calcareous
80	90	0	0	0	0	100	yellow-tan ostracod-rich and oolitic limestone; calcareous
90	100	0	0	0	0	100	46
100	110	0	0	0	0	100	"
110	120	0	0	0	0	100	66
120	130	0	0	0	0	100	" gray and minor yellow
130	140	0	0	0	0	100	gray sandy limestone; red-brown fossil fish imprint?; trace oolitic limestone; calcareous
140	150	0	0	0	0	100	46
150	160	0	0	0	0	100	gray and yellow-tan sandy limestone; fossils; some oolitic; snail?; calcareous
160	170	0	0	0	0	100	yellow sandy limestone
170	180	0	0	0	50	50	yellow-green coarse sandstone and sandy limestone; trace black microfossil?; calcareous
180	190	0	0	0	0	100	" gray sandy limestone
190	200	0	0	0	20	80	gray and yellow coarse sandstone and sandy limestone
200	210	0	0	0	tr	100	white limestone and trace sandstone; trace pyrite; brecciated; calcareous
210	220	0	0	0	tr	100	
220	230	0	0	0	0	100	gray limestone and sandy limestone

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Depth Range (feet)			PERC	ENTA	GES		
		uncon	solidated	consolidated		ted	COMMENTS
		css*	gr*+	ms*	ss*	ls*	
230	240	0	0	0	50	50	gray sandstone and limestone; calcareous
240	250	0	0	0	100	tr	white-gray sandstone; trace limestone; calcareous
250	260	0	0	0	100	tr	" green gray; slightly calcareous
260	270	0	0	0	100	tr	"
270	280	0	0	0	50	50	green-gray and gray sandstone and limestone; calcareous
280	290	0	0	0	80	20	"
290	300	0	0	0	100	tr	gray sandstone; trace limestone; calcareous
300	310	0	0	0	50	50	gray limestone and light green-gray sandstone; some ostracod; calcareous
310	320	0	0	0	50	50	"
320	330	0	0	0	50	50	"trace pyrite
330	340	0	0	50	25	25	gray and white mudstone, sandstone, and chalky limestone; calcareous
340	350	0	0	50	0	50	tan and green limestone and mudstone; calcareous
350	360	0	0	50	tr	50	green ostracod-rich limestone and tan mudstone; trace sandstone; calcareous
360	370	0	0	80	0	20	" green and green gray; no sandstone
370	380	0	0	80	0	20	" green and tan; trace black fossil?
380	390	0	0	80	0	20	" gray and brown
390	400	0	0	50	0	50	"

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		unconsolidated		consolidated			COMMENTS
		css*	gr*+	ms*	ss*	ls*	
400	410	0	0	0	0	100	white-gray ostracod-rich limestone; black fossil; some oolitic limestone; pyrite; calcareous
410	420	0	0	0	0	100	white-gray oolitic and ostracod-rich limestone and sandy limestone; calcareous
420	430	0	0	0	20	80	gray-green coarse sandstone and sandy limestone; pyrite; slightly calcareous
430	440	0	0	0	80	20	
440	450	0	0	0	50	50	"

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